IN SENATE OF THE UNITED STATES.

MAY 6, 1836.

Read, and ordered to be printed.

Mr. SOUTHARD made the following

REPORT:

The Committee on Naval Affairs, to whom was referred the memorial of the City Council and Chamber of Commerce of Charleston, South Carolina, for the establishment of a navy yard at that place, report:

That they have investigated the subject, upon such evidence as was in their possession, and which was referred to by the Secretary of the Navy, in answer to an inquiry of the committee, which is annexed to this report, and made part thereof.

The committee have not been able to persuade themselves that it is expedient greatly to increase the number of our navy yards; they are, however, of opinion, that it might be useful to the public interests to have one established at some point between the mouth of the Chesapeake and the southern coast of Florida, but they have not such information as will justify them in making a selection. They, therefore, offer a resolution:

Resolved, That the Executive be requested to cause to be made the necessary examinations and surveys of the several harbors south of the mouth of the Chesapeake bay, and a report upon the comparative facilities and advantages of the same, for the establishment of a navy yard, to the next session of Congress.

NAVY DEPARTMENT,
April 4, 1836.

SIR: In answer to your letter of the 21st ultimo, asking my opinion, and such information as may be in possession of this Department, in relation to certain memorials for the establishment of navy yards at Baltimore, and at Charleston, South Carolina, I have the honor to state that, on the 16th of December, 1826, the Secretary of the Navy transmitted to the House of Representatives a report on the survey of the harbor of Baltimore, (see documents of the House of Representatives, 2d session, 19th Congress, No. 13.)

From this report it appears that the harbor of Baltimore presents many

advantages as a navy yard, and, in my opinion, it might be made a station for the building and repairing of ships of war, at a moderate expense, and with great advantage to the United States.

As to the harbor of Charleston, South Carolina, I must beg leave to refer you to a report made on the 19th of January, 1826, to the Senate, by the Secretary of the Navy, (see Senate documents, 1st session, 19th Congress, No. 27.)

This report contains much satisfactory information as to the harbor of Charleston, and leaves but little doubt that that harbor might be judiciously selected as a navy yard for the building and repairing vessels of war, (except those of the largest classes.)

The position of that harbor, with respect to our squadron in the West Indies and Gulf of Mexico, affords a strong argument in favor of selecting it as a naval station, inasmuch as it is often important to obtain recruits of seamen, and supplies of provisions and stores for our vessels, without the inconvenience and delay of visiting our Northern ports.

There is no information in this Department beyond what is herein stated, as to the propriety of establishing navy yards at Baltimore, or at Charleston.

I am, with great respect,
Your obedient, humble servant,
M. DICKERSON.

The Hon. SAMUEL L. SOUTHARD,
Chairman of the Committee on Naval Affairs
of the Senate of the United States.

Report of the Secretary of the Navy, with the report of the officer appointed to examine the harbors of Charleston and St. Mary's, on the expediency of establishing a navy yard at either of those places, &c.

(Communicated to the Senate January 23, 1826.)

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Documents accompanying the report.

No. 4. Letters from Dr. Joseph Johnson, John Stoney, Charles P. Mey, and James Marsh, in relation to suitable sites for a navy yard at Charleston.

No. 5. Report of Dr. George Logan, surgeon in the navy, in relation to the health of the several positions in the harbor of Charleston suitable for a navy yard.

F. Letter from Robert Y. Hayne to the Secretary of the Navy, covering the following documents:

No. 1. Answers of John Strohecker to questions submitted to him, in relation to the practical facilities of Charleston for naval purposes.

No. 2. Letter from the Hon. Joseph Johnson, intendent of Charleston, showing the price of labor, with some remarks on the bar.

No. 3. Letter from James Marsh.

No. 4. Report of president of the medical society, and of the clerk of the board of health, showing the annual number of deaths in Charleston from yellow fever, for eighteen years, from 1808 to 1825, inclusive.

No. 5. Report showing the prices at which the public institutions have been supplied with beef in Charleston, from 1814 to 1824 inclusive.

No. 6. *Extracts* from remarks on the practical facilities of Charleston for naval purposes, by a gentleman said to be "a practical and scientific man of great experience in the West Indies seas."

A.

NAVY DEPARTMENT, *January* 19, 1826.

SIR: In answer to a resolution of the Senate of the 17th instant, that the Secretary of the Navy "be directed to communicate to this House the report of the officers employed under the act 'authorizing an examination of the harbor of Charleston, in South Carolina, and St. Mary's, in Georgia, for the purpose of ascertaining the expediency of establishing a navy yard at either of those places,' together with such charts, surveys, or documents connected with the subject as may be in his possession," I have the honor to send a copy of the report made by Master Commandant Kearney, with the papers which accompanied it; also, sundry original papers on the subject submitted to the Department by the honorable R. Y. Hayne.

I am, very respectfully, &c.
SAMUEL L. SOUTHARD.

To the PRESIDENT
of the Senate of the United States.

B.

NEW YORK, *December* 16, 1825.

SIR: I have the honor herewith to enclose my report in relation to the survey and examination of Charleston and St. Mary's bar, being in

compliance with orders from you, appointing me superintendent of that service.

I am, respectfully,
Your obedient servant,
LAWRENCE KEARNEY,
Master Comdt. U. S Navy.

Hon. SAMUEL L. SOUTHARD,
Secretary of the Navy.

C.

Report to accompany a chart of Charleston bar, in South Carolina, surveyed by order of the honorable Samuel L. Southard, Secretary of the Navy.

The following are the points upon which information is required, and to which replies are herewith furnished, viz:

1st. Depth of water upon the bar at the lowest and highest spring tides, and at common tides.

2d. Whether the depth of water upon the bar is affected by any, and what, winds, to what extent, and in what manner.

3d. The strength of the current on the bar, and to a safe anchorage within it.

4th. Width of the channel upon the bar, width of the bar, and nature of the bottom; with what winds large vessels can cross the bar, bound inwards and outwards.

5th. The prevailing winds at different seasons of the year.

6th. The extent of safe anchorage for vessels of the largest size which can cross the bar.

7th. The convenience of such anchorage for receiving supplies from the shore.

8th. Facilities for obtaining good fresh water.

9th. What supplies of stores and provisions can be obtained for a fleet, from the surrounding country, and to what extent at short notice.

10th. Whether the harbor has good positions for a dock or navy yard.

11th. How near the present shore of such position does a channel run of the same depth as the water on the bar at high spring tides.

12th. Has it good fresh water in its vicinity, and in what quantities.

13th. General health of the position and quality of the soil.

14th. Facilities of wharfing to the channel.

15th. Whether the worm is destructive in the harbor.

Answer to question 1st.—The depth of water on Charleston bar, at the lowest spring tides, is eleven feet at low water, and at the highest spring tides, 19½ to 20 feet, high water. At common tides, at low water, there is a depth of 12 feet, and at high water, 16½ to 17 feet: a medium tide may be fairly considered to afford a depth at low water of 12 feet, and at high water 17 feet.

Papers marked No. 1, attached hereto, will afford information on this subject, from experienced pilots of this harbor.

Answer to question 2*d.*—The depth of water on Charleston bar is much affected by winds. Those from northeast and southeast cause it to flow from one to two feet over its ordinary depth, and those from the northwest and southwest decreases it in the extent according to the force and duration of them.

Papers marked No. 1 also afford information on this subject.

Answer to quere 3*d.*—The strength of current on the bar is irregular, being governed in a great degree by the winds; uninfluenced by wind, its velocity at half tide is two miles per hour, and to a safe anchorage within the bar, about $2\frac{1}{2}$ when in the channel way.

Answer to quere 4*th.*—The width of the channel on the bar is 300 yards. The width of the bar is $\frac{3}{4}$ of a mile. The bottom is hard gray sand.

The best winds to cross the bar bound inwards are from N. E. to S. E. The best winds bound outwards are those from N. W. to S. W.

Answer to quere 5*th.*—The prevailing winds in winter are from the N. W. to N. E. and in summer from S. E. to S. W.

Answer to quere 6*th.*—The first anchorage is in the drop, or Four-fathom hole, the light-house bearing from W. to W. by N. about one mile and three-quarters distance, and is about half a mile square in extent.

This anchorage is open to the winds from the N. E. and S. E., but owing to the shoal of the bar, the sea is not very heavy; the holding ground is good.

Rebellion roads, off Sullivan's island, is a commodious and safe anchorage, half a mile in extent one way, and one and a half the other, and good holding ground, susceptible of being well protected by batteries.

Answer to quere 7*th.*—From the upper part of Rebellion roads to the city is three miles, and the facilities of obtaining supplies from the shore easy.

Answer to quere 8*th.*—Good fresh water can be obtained from a number of tanks, which are employed in the harbor. They will either supply good spring or cistern water as may be wished, delivered on board any where within the bar.

Answer to quere 9*th.*—The surrounding country affords but few articles for the supply of a fleet in the way of provisions; rice may be considered the only article for an immediate extensive demand; other articles in small quantities can be obtained in the city to supply the wants of single ships; naval stores of various kinds can be obtained conveniently.

Paper marked No. 2 affords information on this subject.

Answer to queries 10, 11, 12, 13, 14.—Several positions present themselves for a dock or navy yard, viz. Shute's Folly, a small island of marsh in front of the city; 2d, Lamprier's point, mouth of Wando river; Strobel's mill-seat, on Cumming's point, on the Ashley river; 4th, the old navy yard, about 4 miles from town, now Cochran's farm; 5th, Hampstead, mouth of Town creek; 6th, Marsh's island, mouth of Town creek; 7th, a lot of land above Gadsden's wharf, on Cooper river; 8th, Mey's wharf, within the limits of the city; 9th, Marsh's wharf, also within the limits of the city.

A description of the above places is given in papers No. 3 and 4, and

No. 5 describes the health of each, except the two last-mentioned places. Mey's and Marsh's wharves, and the lot of land above Gadsden's wharf, all of which are perfectly healthy as any part of the city.

Some of the above positions being subject to country fever, although advantageously situated for the establishment of a navy yard, are, consequently, not recommended.

Shute's Folly.—The island of marsh in front of the city, at the mouth of Cooper river, is conveniently situated; great expense, however, must be laid out, in raising, on this low alluvial foundation, a sufficient height to build on, free from the effect of tides, the highest of which flows entirely over the island. It will therefore be necessary to raise it four feet higher than its present greatest elevation.

The channel of Cooper's river washes the western side of this site, and, in some places, an equal depth with that on the bar, at high spring tides, is found within thirty feet of low-water mark.

A basin could be easily formed in this island, for the security and preservation of timber; and the mud removed in making the basin will contribute to filling in, and raising the foundation for the establishment.

Fresh water must be collected in cisterns, or supplied from tanks, which supply the shipping generally. It is said to be healthy.

Wharfing to the channel is easy.

2d. Lamprier's Point, at the mouth of Wando river, is reported unhealthy, as specified in paper No. 5; but otherwise possesses great advantages; distance to the edge of the channel, or eighteen feet water, is one hundred and seventy-three yards.

3d. Strobel's-Mill seat, on Ashley river, possesses advantages, in point of situation, as a harbor, beyond others mentioned; but wharfing, out of the channel, is a great objection to it, the distance being four hundred and sixty yards, to reach the depth of water required, and the mud-flat is soft, making it doubtful whether a foundation could be made sufficiently permanent for building upon it a necessary distance from the shore. The health of this place, as by the annexed report, seems doubtful.

4th. The Old Navy Yard is, undoubtedly, subject to ague and fever, and is not, therefore, recommended.

5th. Extremity of the lines at Hampstead, mouth of Town Creek.

This place has health and good water, but is difficult in wharfing out of the channel, the distance being greater than at Strobel's mill. It likewise lies open to the S. E. gales.

6th. Island of Marsh, at the mouth of Town creek.

This island is conveniently situated, being contiguous to the upper part of the city, out of the way of shipping in the river. It is healthy, with bold water on the side next to Town creek.

What may be said of the advantages of Shute's Folly, applies to this place; being equally low, it is easily defended, being near the N. E. end of the lines of the city. This place is open to the sea breeze, and is believed to be healthy. Town creek is bold along this island, and affording a good anchorage in six and seven fathoms water, for a squadron; good fresh water is procured in the vicinity.

7th. A Lot of Land above Gadsden's wharf.

This is an extensive mud-flat, and requires wharfing out, in the same

manner as at Strobel's mills, before mentioned. It is healthy, and in the vicinity of good water.

8th. MEY'S WHARF, at the foot of Pinckney street.

This wharf was used during the late war, for the navy; it is healthy and convenient, and for building a sloop of war, or one or two small vessels, is sufficiently capacious. A description of it is given in paper No. 4. For immediate purposes, this wharf has much to recommend it; possessing good brick stores, and giving sufficient room for fitting out any number of vessels which it is probable may put in that harbor at any one time.

9th. MARSH'S WHARF. This wharf is also very convenient, and it is believed to have the best foundation of any in the city, having formerly been the property of General Gadsden. Much expense and labor has been bestowed on it, to make the foundation firm and good, before it became the property of Mr. Marsh. It is well situated as regards health and convenience.

Paper marked No. 4 refers to it.

These are all the sites which have either presented themselves in my examination, or have been recommended by others.

In reply to the 15th question, whether the worm is destructive in the harbor, &c., it may be said they are, but not more so than in other harbors on the coast.

To preserve health, to afford convenience, for either fitting or building vessels, and to lessen the expense of a naval establishment in the harbor of Charleston, the two sites marked No. 8 and 9, are recommended, viz: May's and Marsh's wharves.

An establishment at either of the sites in the city will afford both convenience for furnishing supplies, and also some security, which, under the peculiar situation of the country, at certain seasons of the year, is a paramount advantage.

In respect to the sites for a naval establishment, and other matters in relation to the harbor of Charleston, I have annexed hereto letters from gentlemen, who have very politely afforded me information, the result of their long acquaintance with the country; and I beg leave respectfully to submit to your inspection, as embracing, perhaps, fuller information than the time of my examination permitted me to acquire, the annexed letters and reports from Thomas Bennett, Esq., chairman of a committee of citizens convened for the purpose of forwarding the views of establishing a navy yard; also, a joint letter from Doctor Joseph Johnson, president United States Branch Bank, and Mr. John Stoney, and Mr. John Robertson, merchants, the latter navy agent for a number of years. As to the health of the places named, I beg leave to refer you to Dr. Logan's report, paper No. 5; who is an old practitioner, and now naval hospital surgeon, which report is corroborated by other respectable physicians of that place, with whom I have conversed.

In submitting these documents, in relation to the survey of Charleston bar, I beg leave to offer the following general observations, as to the fitness of the port for a rendezvous for our light cruisers in the West Indies, and seas contiguous.

The result of my examination of that place, from January to July, 1825, herewith furnished, exhibits difficulties which preclude a recommenda-

tion of the place for a naval establishment of much extent; but, for a limited one, commensurate with the depth of the channel over the bar, the importance of its location, in regard to its proximity to the West Indies, and the great facilities it affords cruisers in that quarter as a rendezvous in the winter season, being considered, it presents many advantages claiming attention.

Charleston lies nearer the range of our West India trade than any other port south of the Chesapeake capable of affording equal protection in war and repairs or supplies in case of distress. The Gulf stream facilitates your passage, and carries you within a few hours' sail of the port.

Cruisers returning for supplies will afford protection to convoys, as far as danger from pirates is apprehended.

Sailing again from Charleston, you can avail yourself of the variable winds which prevail, as far south as the Bahamas; by keeping to the eastward as much as is necessary to gain the longitude of the passages into the West Indies, a short passage can be made; and it is practically known, that a vessel can reach her cruising ground about east end of Cuba, or islands further to windward, in less time from that port than any part of the Floridas, or ports in the Bay of Mexico, which lie west, directly to leeward. Sailing up the south side of Cuba is found very tedious, and almost impracticable for small vessels, during the seasons the trade winds blow hard. The Gulf passage is preferred, and it will therefore be evident that a vessel must make a very circuitous route, to gain the windward islands from these places: *from Charleston her course is direct.* This is a matter of great consequence to our small class of vessels, which have not the capacity to take on board large supplies of stores, and it is therefore desirable they should lose as little time as possible in going and returning to their stations.

Charleston bar admits vessels of the rate of eighteen guns, and the depth of water on an average may be fairly estimated at twelve feet at low water, and sixteen and a half feet at high water, to seventeen feet; common tides, and at ordinary spring tides eighteen feet; high spring tides twenty feet. A mean of the tides will therefore give seventeen feet at high water. Sloops of war can, by means in their power of altering their trim, frequently get into Charleston with safety.

The greatest difficulty occurs in getting again to sea, as a free wind is necessary, which lowers the tide on the bar, as may be seen by referring to the report of the pilots, herewith furnished.

This difficulty is, however, somewhat obviated by the use of steamboats, which frequently tow vessels out of that harbor with great ease and safety, in calms or head winds.

Charleston bar being composed of sand, and acted upon by gales and strong currents, is ascertained to change, in the course of time, the position of the channels; therefore, they may be found to disagree with the chart in a few years. In consideration of this change it is suggested that, instead of the present beacon, a moveable beacon be placed in front of the light-house, to be so shifted, from time to time, as to obviate the difficulty which arises in having the two objects out of range, as they now are, much to the inconvenience and danger of strangers to the coast who may attempt, without a pilot, to go in.

Suitable fortifications on Sullivan's island and Fort Johnson reef,

near Pelican bank, aided by one steam-frigate, would render Charleston as secure as any point on our coast.

Directions for entering the port of Charleston.

Bring the light-house to bear N. W. by W. and stand for it until you see the *buoys* on the bar, three in number; the outside or southernmost buoy on the south breakers, leave to the left hand, or southward of you, about a cable's length distant; the other two buoys, on the north breakers, leave on your right hand, or to the northward of you, about half a cable's length.

After crossing the bar, bound up, steer N. ¾ W. along the north breakers, which will carry you up to Sullivan's island.

These directions will answer for vessels drawing twelve feet and under, but, over that draught, the bar should not be attempted without a pilot.

The latitude of the S. E. angle of Fort Moultrie, on Sullivan's island, is 32° 46′ 27″ north, longitude not ascertained.

LAWRENCE KEARNEY,
Master Com. U. S. Navy.

In obedience to your order of the 18th of April last, requiring an examination of St. Mary's bar, I have the honor to report that, upon a strict and careful set of soundings, taken in July and August, the general depth of water on St. Mary's bar, at low tide, was twelve feet six inches; that the depth is somewhat greater than at the time it was surveyed by Lieut. Ramage, a copy of whose report is herewith transmitted.

The difference, I conceive, arises from the effect of the prevailing winds at the periods at which the soundings were taken; the one being in the middle of winter, when the prevailing winds are blowing from the land, and the other in the summer, when they generally blow on shore.

The average depth of St. Mary's bar may be estimated at twelve feet, the same as at Charleston, taking the season through.

The following distances were actually measured at low water, viz: From 13 feet within the bar, to 13 feet without, measured 150 yards.

The distance from the north to the south shoals measured three hundred yards.

The sands on the bar are much the same as on Charleston bar, subject to shift by the effect of heavy gales; but how far they have been affected since the survey of Lieut. Ramage, is not clearly ascertained, as the chart of that period was not fully completed at that point, in consequence of the inclemency of the weather not permitting the taking of a sufficient number of lines of soundings to delineate every part and feature of the bar.

Additional lines of soundings have been added, but, as before mentioned, the difference of the season of the year may produce some variance in the depth, with those before taken.

The rise and fall of tide at this bar, as well as at Charleston bar, may, upon an average, be estimated at six feet.

The directions for entering this bar, and for anchoring in the harbor, &c., in the report of Lieut. Ramage, are found to be strictly correct.

A considerable enlargement of the sandy shoals forming the N. E. side of the harbor, has taken place since the survey of Lieut. Ramage, which may eventually have a tendency to confine the water in such a narrow passage as to wash away and make a deeper channel over the main bar.

The harbors within the bar, called Cumberland and Amelia, are safe and commodious.

The convenience of this port as a naval rendezvous for West India cruisers, is about the same as Charleston, in regard to the facilities of reaching it in the winter season.

The difficulty which arises in proceeding to a further distance north, to arrive at Charleston, is equalled by the difficulty of proceeding to a greater distance west, to arrive at St. Mary's, during the continuance of the westwardly gales, which frequently blow in the winter season very heavy from the coast.

LAWRENCE KEARNEY,
Master Commandant U. S. Navy.

D.

NEW YORK, *December* 31, 1825.

SIR: I have the honor to inform you that acting Lieutenant Jonathan W. Sherburne has so far completed the chart of Charleston bar as to present it as a reference, connected with my report I had the honor to send in on the 16th instant.

It has been determined since my report, (by calculations upon the survey of St. Mary's bar, in 1822 and in 1825,) that the shoal at the north side of the channel advances to the southward, as at Charleston bar.

I am, respectfully,
Your obedient servant,
LAWRENCE KEARNEY.

Hon. SAMUEL L. SOUTHARD,
Secretary of the Navy.

E.

Extract from the report on the survey of the coast of Florida, made by James Ramage, United States navy.

These observations commenced at St. Mary's river, dividing Georgia from Florida, and continue with the line of the seacoast, until they terminate at the Tortugas islands.

Cumberland harbor, which lies at the entrance of St. Mary's river, is bounded on the north by Cumberland island, on the south by Amelia

and Tiger islands, on the west by Georgia and the river St. Mary's, and on the east by a line of shoals, extending from the point of Cumberland island, in a southern direction, about five and a half miles, to the bar. It is spacious and perfectly secure, having good anchorage and a sufficient depth of water. The entrance over the bar is narrow, but not difficult, as is also the channel formed by the above line of shoals, and those extending from the shore to Amelia island.

Connected with Cumberland harbor is a smaller one, formed by Amelia and Tiger islands, having sufficient depth of water for any vessels that can cross the bar, and affording the most perfect shelter from all winds.

The greatest depth of water found on the bar at St. Mary's, during three months' observation, was eighteen and a half feet, the least, eleven feet: but the ordinary rise and fall, when not acted on by tempestuous weather, or other causes, may fairly be estimated at seventeen and a half for high water, and eleven and a half for low, and generally about fifteen feet at half tide.

Directions for crossing St. Mary's bar, and sailing into Cumberland and Amelia harbor.

Bring the light-house on Cumberland island to bear N. W. ½ W. and steer directly for it; the soundings will gradually shoal, from seven fathoms to five, then very close to the bar; continue the above course, which will cross the bar in mid-channel, between the north and south breakers. When over the bar, where a boat-buoy is now placed, immediately steer N. W. by N. ½ N. by compass, to clear a shoal, called the Middle, about two and a half miles distant, and extending from the shore of Amelia island to within a short distance of the eastern side of the channel. There is a buoy on the spit of this shoal, which must be left on the larboard hand. The channel between the bar, on this buoy, is very narrow, and the deepest water close to the breakers on the east side; the soundings in the middle are from seventeen to twenty-three feet, at low water, deepening nearer to the breakers, and decreasing towards the shore. After passing the bank of the Middle, steer N. W. by N. ½ W. for the north end of Amelia island, the channel becomes wider, and the water gradually deeper. When up with the point of Amelia, if bound to Cumberland harbor, steer N. W. by W. until the light-house bears N. E. distant from Cumberland island one mile; then anchor in five fathoms, mud and sand, with good holding ground. If bound to Amelia harbor, keep Amelia point close on board, to avoid an extensive shoal which makes off from Tiger island; and, by the lead, continue to steer along the shore of Amelia until up with the town of Fernandina; then anchor in mid-channel in six and a half fathoms water, and excellent holding ground. If bound to the town of St. Mary's, from Cumberland harbor, from which the entrance of the river is plainly discoverable, steer for it, avoiding a spit which extends from the lower point of Jolly river, and enter the river St. Mary's about mid-channel; continue thus to ascend it until near the town, when, to avoid an extensive shoal making from the larboard shore, two-thirds across, it is necessary to keep close to the marsh on the starboard side. A vessel drawing eighteen feet water can navigate the river St. Mary's as high as the town.

There is a small channel of entrance to Cumberland harbor, called the Swash channel, in which there is from five to seven feet, at low water; it runs near to Cumberland island, but so frequently varies in its direction and depth, from the effects of winds, that it should never be attempted but in extreme cases.

The latitude of the light-house on Cumberland island is 30° 45′ 47″ N. The longitude could not be accurately determined, for want of time-keepers. The observed variation of the magnetic needle was 6″ 58 east, the daily variation 25″.

The tides at St. Mary's, when not acted on by temporary and local causes, are very regular. It is high water on the bar, on the full and change of the moon, at 7′ 40″; in Cumberland harbor, at 8′ 45″; and the average rise and fall is estimated to be six and a half feet.

The east and northeast winds, being those which mostly prevail in the winter months, and sometimes blow with great violence, create the highest tides, by forcing a large column of water upon the coast. The winds from N. W. have a contrary effect; but, although they sometimes blow with violence, they do not last long, generally shifting to the N. E. and E. During the spring and summer months, the land and sea breezes prevail, occasionally interrupted by an easterly gale, which lasts four or five days.

Remarks relative to the defence of St. Mary's.

When it is considered that St. Mary's is the only safe harbor, possessing the greatest depth of water at its entrance, on the eastern frontier of the United States south of the Chesapeake bay, it becomes an important point on the line of maritime defences; and whether we consider it as affording protection to our military and commercial marine in time of war or security to the Southern section of our country, the results are manifestly in favor of its being well defended. As an exterior line of defence, having these objects in view, a fort, constructed on the south point of Cumberland island, and another opposite, on the north point of Amelia, would be the most favorable positions, the distance between them being 4,807 yards; therefore both would completely command the channel, through which all vessels must pass to reach Cumberland harbor.

A small steam-battery would be a most efficient auxiliary force, if constructed to navigate the extensive line of inland navigation, to which it would not only afford protection, but in case the works of St. Mary's were threatened by a large force, it would prevent the enemy from crossing the bar with his heavy vessels, which might be effected by lightening them of their armament, and afterwards receiving it on board when over the bar—a measure which the forts alone could not prevent.

It is very much to be regretted that the light-house on Cumberland island has been located there; it now serves only as a *light*, but had it been placed in the proper position, on Amelia island, it would have answered the double purpose of a light and beacon to direct the mariner in his course across the bar. Under existing circumstances, a beacon erected on Amelia island would be very serviceable in sailing to and over the bar, inside of which a boat-buoy is now placed; but as it is liable to be occasionally removed, either by gales of wind, or for repairs, the necessity of a beacon is very apparent.

The climate of St. Mary's is nearly similar to that of the whole of Florida, almost continual springs: the mean temperature in the month of December was 60.54 of Fahrenheit's thermometer; in January, 53.49; and in February, 49.48. The greatest thermometrical elevation, during the above period was 78.76, and the lowest depression 21.40. The range of the thermometer, during the summer months, is from 82° to 87, and the mean annual heat may be estimated at 72.

The soil in the vicinity of St. Mary's river, near the sea, is chiefly sandy. Large tracts of alluvion, or marsh, border on the rivers; but as no attempts have hitherto been made to reclaim them, it is problematical whether they are capable of being rendered arable. The sand hills, or, as they are called, hammock lands, produce the long staple cotton, of a good quality, which is at present the principal article of agriculture. Some attempts have been made to raise the sugar cane on the banks of the river, which so far succeeded as to produce the *cane*, but I am not informed that sugar was produced from it.

The district of St. Mary's furnishes abundant supplies of the finest kinds of timber, namely: live oak, hickory, pine, cypress, ash, maple, and locust. The general face of the country presents a sterile and barren appearance, apparently incapable of ever supporting a dense population, without forced upon it from causes having their origin in its geographical and political position.

The river St. Mary's is remarkably destitute of finny inhabitants. It has its sources (according to a recent survey, made by order of the State of Georgia) in the Okefinoka swamp, from whence it pursues a meandering course four hundred and twenty miles, until it empties itself into the sea between Cumberland and Amelia islands. It is navigable for vessels of one hundred and fifty tons sixty miles from its entrance.

Should the works I have already proposed be erected for the defence of St. Mary's, a great security would be afforded, in time of war, to the State of Georgia and Territory of Florida, a safe retreat to our public and private armed vessels engaged in the West India seas, and an important line of inland navigation protected, extending from the river St. John's, in Florida, to Charleston, in South Carolina, a distance of nearly two hundred miles.

No. 1.

Replies of Michael Dulany, a branch pilot, to questions in relation to Charleston bar.

CHARLESTON SHIP BAR.

Ques. What is the depth of water at high tide, at the lowest spring tide, on an average, in moderate weather?

Ans. Eighteen feet, at high water.

Ques. And what at the highest springs?

Ans. From twenty to twenty-one feet, but have known twenty-two feet at high water.

Ques. What depth at low water, common tides (average?)

Ans. From twelve to twelve and a half feet at low water.

Ques. What at high water, common tides—say, at an average, and moderate weather?

Ans. From sixteen and a half to seventeen and a half feet at high tide.

Ques. What difference in the depth of water on the bar is made by a stiff breeze from the eastward?

Ans. From one and a half to two feet, if the wind has been blowing twenty-four or thirty hours.

Ques. What difference is there with a stiff breeze off shore, say from the northward and westward?

Ans. The wind from north to northwest does not materially affect the tide, but from southsouthwest to northnorthwest would lessen the tides from two to three feet.

Ques. What are the rise and fall of common tides, moderate weather?

Ans. Six feet.

Ques. What are the rise and fall of spring tides, moderate weather?

Ans. From seven to eight feet, and sometimes eight and a half feet.

Ques. What are the best winds to cross the bar, with a heavy draught of water?

Ans. The winds from north to southsoutheast would be best to go into port, and to go out, from north round by the west to south, are the best.

Ques. What winds affect the flowing of the tides to the greatest advantage?

Ans. From northeast to southeast.

Ques. With what draught of water can you prudently attempt to cross the bar, at common tides; and at what time of the tide would you enter the bar?

Ans. From sixteen and a half to seventeen feet at smooth water, high tide, either going in or out, one hour before high water.

Ques. With what draught would you attempt it at spring tides? and what is the greatest draught you would venture in with under the most favorable circumstances of winds and tides?

Ans. At spring tides and smooth water would attempt to bring in seventeen and a half or eighteen feet.

Ques. What is the greatest draught of water you can carry out with convenience and safety, upon an average tide, say between the neaps and springs?

Ans. From fifteen and a half to sixteen and a half feet, with the greatest safety when the sea is smooth.

MICHAEL DULANY,

A branch pilot for the bar and harbor of Charleston.

No. 1.

Replies made by John Mullins, a branch pilot, to questions in relation to Charleston bar.

CHARLESTON SHIP BAR.

1*st ques.* What is the depth of water at high tide, and lowest spring tides, (on an average,) in moderate weather?

Ans. Seventeen feet and a half.

2*d ques.* And what at the highest springs?

Ans. From nineteen to twenty feet.

3*d ques.* What depth at low water common tides (average?)

Ans. Twelve feet.

4*th. ques.* What at high water, common tides, say on an average, and moderate weather?

Ans. Eighteen feet.

5*th ques.* What difference, in the depth of water on the bar, is made by a stiff breeze from the eastward?

Ans. From a foot and a half to two feet.

6*th ques.* What difference is there with a stiff breeze off shore, say from the northward and westward?

Ans. The north wind lowers the tide none; the west wind from one to two feet, according to the strength of the breeze.

7*th ques.* What are the rise and fall of common tides, moderate weather?

Ans. Six feet water.

8*th ques.* What are the rise and fall of spring tides, moderate weather?

Ans. From seven to eight feet.

9*th ques.* What are the best winds to cross the bar, with a heavy draught of water?

Ans. From northeast to southeast.

10*th ques.* What winds affect the flowing of the tides to the greatest advantage?

Ans. From north to east.

11*th ques.* With what draught of water can you prudently attempt to cross the bar at common tides? And at what time of the tide would you enter the bar.

Ans. Seventeen feet. At five hours' flood.

12*th ques.* With which draught would you attempt it at spring tides? and what is the greatest draught you would venture in with under the most favorable circumstances of winds and tides?

Ans. Eighteen feet.

13*th ques.* What is the greatest draught of water you can carry out with convenience and safety, upon an average tide, say between the neaps nd springs?

Ans. Sixteen and a half feet.

JOHN MULLINS,
Branch pilot for the bar and harbor of Charleston.

No. 2.

Report of John Robertson, Esq., late navy agent at Charleston.

PORT OF CHARLESTON, SOUTH CAROLINA.

Question 1st. The depth of water upon Charleston bar, at the lowest and the highest spring tides, and at common tides?

Answer. The lowest tides are from June to August; spring tides, the highest, are in April, May, September, and October; common tides, from November to March. Water on the bar, lowest 17 feet; highest spring tides, 21 feet; common tides, 18 feet.

Question 2d. Whether the depth of water upon the bar is affected by any, and what winds? to what extent, and in what manner?

Answer. The tides are affected by southerly and westerly winds, which prevail from June till September, and are called neap tides. The northerly winds prevail from November to March. The northeast winds raise the tides, and the southwest and west reduce the most. At times, the tides rise only three and a half to four, and, at other times, with a northeast to southeast wind, to 8 feet.

Mr. Michael Dulany, one of the oldest pilots, states he can carry out a merchant ship drawing seventeen or seventeen and a half feet, and a man of war of eighteen feet, and that there would be more safety for the latter in crossing the bar, arising from their superior sailing.

Question 3d. The strength of the current on the bar, and to a safe anchorage within it?

Answer. The strength of the flood upon the bar is about two knots; when the wind is southeast to southwest and northeast, one and a half knots. The ebb runs with the usual winds three to three and a half; and if there is a fresh in the river, about four knots. A safe anchorage within the bar may be had, the light bearing west by south, in three and a half to four fathoms. Ships of war generally anchor in the roads, opposite Sullivan's island, in seven to nine feet, [probably fathoms.]

Question 4th. Width of the channel upon the bar? 5th. Width of the bar? 6th. And nature of the bottom? 7th. With what winds large vessels can cross the bar inwards and outwards?

Answer. Width of the channel upon the bar, from north to south, one quarter of a mile. 5th. Width of the bar east and west, about a mile; the shoal part about three hundred yards. 6th. Bottom, sand and mud. 7th. Vessels cross the bar inwards, with the winds from north to south; and outward, from north to west.

Question 8th. The prevailing winds at different seasons of the year?

Answer. The prevailing winds from June to September, are southeast to west; from September to January, north to east; from January to May, northeast and southwest.

Question 9th. The extent of safe anchorage for large vessels, after crossing the bar, may be from Cumming's point, opposite Sullivan's island, all the way to the city, an extent of six miles and upwards.

Question 10th. The convenience of such anchorage for receiving supplies from the shore?

Answer. The convenience of such anchorage for receiving supplies is easy, unless a gale of wind should happen, which is seldom. Packet-

boats and steamboats can always be had, should vessels of war not choose to use their own boats and men.

Question 11th. The facilities for obtaining good fresh water?

Answer. Good fresh water is supplied by tanks, with forcing pumps, from good wells. There are large cisterns upon the wharves, which afford a good supply, if preferred.

Question 12th. What supplies of provisions and stores, for a fleet, could be obtained from the surrounding country, and to what extent, at short notice?

Answer. The planters of this State cultivate rice and cotton, and do not turn their attention to salting pork and beef, nor growing any great quantity of wheat for grinding and putting up flour, preferring to depend upon the North for supplies of salted provisions, butter, lard, flour, &c.

In the event of a fleet calling at this port for supplies, it is admitted only a small quantity could be had, except fresh beef, pork, salted beef, salted pork, bread, flour, whiskey, &c. If it was known that smaller-sized vessels of war would resort to this for supplies, merchants would always keep on hand such articles as may be required in every line of business. The United States might have a depot of salted beef, pork, butter, and such articles as would keep in this climate, and purchase the smaller as occasion required.

Question 13th. Whether the harbor has good positions for a dock or navy yard?

Answer. It has several good positions. A navy yard might be established upon a scale suited to the depth of water upon the bar at spring tides, at different places:

1. Opposite the city, upon the same island whereon Castle Pinckney is erected; to the north of the castle is a body of marsh, which, at a considerable expense, might be excavated and deepened for a dock; the mud and sand taken out would, in part, raise a dam or bank to erect the necessary buildings upon, aided with palmetto logs and stone. There are plenty of shells on banks in the rivers, which, with coarse lime, a strong work could be erected; a cistern could be built to contain all the rain-water that might fall upon the buildings. The castle has a cistern to supply a soldiery. The channel runs within fifty yards of the marsh. A rough sketch has been made of a dock. The advantage of a depot adjoining the castle would be, that the seamen and workmen could at all times be kept at their post, and prevented from getting intoxicated at houses in the city. This situation would require a strong embankment to resist a rise of waters during a hurricane.

2. Three miles above the city, on the eastern side of Cooper river, is Lamprier's point, where there is a basin surrounded nearly by high land, the diameter of which is 150 yards; this could be excavated and deepened so as to admit vessels, at spring tides, of ten feet, to enter from the river.

Wells could be sunk to supply all the good water that might be wanted. This site could be fenced in, and the men prevented from visiting the city. The health, at all seasons, is said to be good, as the proprietor lives there all the year.

August, September, and October, are the sickly months.

3. The site where the John Adams was built, is four miles by land

from the city, upon a bold creek of five fathoms. The situation is low, and water bad; all who have lived there the year round never escape the fall fevers. The men cannot be prevented from coming to town at night.

4. Between Gadsden's wharf and wharves to the south, is a body of marsh land, belonging to the estate of the late Colonel Henry Laurens; this is for sale; it would require to be dammed in, and a wharf of palmetto logs erected in the manner all have been done on Cooper river, at a considerable expense.

5. There is a bold creek (Town) above Gadsden's wharf, that is twenty feet deep at low water, and runs near the land, called Hempstead. A wharf could be run from the high land, a distance of 450 yards. The water with which the tanks supply the shipping is from this quarter. This site may be a mile and a half from the centre of the city, and to be improved would require a considerable sum.

6. There are shipwrights who offer their wharves for sale, and would require improvements.

7. There is a tide-water saw-mill upon the margin of Ashley river, upper end of Tradd street.

There is a considerable parcel of land formed with mud and sawdust. A wharf has been run out with palmetto logs, and filled in part; there is ten feet at low water. This mill and site may be purchased.

The river is five or seven feet deep, and is upon the western side of the city, and secure from N. E. and S. E. winds, in hurricane seasons; this situation is capable of extensive improvements; cisterns must be built to contain rain-water that may fall on the buildings. There are not any wells of good water, easy of access, on this river. All pine lumber, and some other kinds, comes into this river, fresh from the country, for the mills on both sides of the city. There is, also, another situation, a quarter of a mile above, on a creek, which would require deepening, to come near the land.

8. A wharf, with two brick stores, tiled and slated, may be purchased or leased from Mr. F. C. May, adjoining the ship-yards, on Cooper river, the same that was occupied during the war by the Navy Department, and since, for a time.

This could be fenced in upon two sides, and would answer as heretofore, upon a small scale. By adding a head to the present wharf, a sloop of war could haul on each side, land stores, careen and refit; there may be eighteen feet at the head of the wharf; bottom soft mud.

This is the most eligible situation in the city for a temporary establishment, all the mechanics being near at hand. A cistern could be made at a small expense to supply vessels in part.

Question 14. How near does the channel run to the shore?

Answer. To Castle Pinckney, about 40 or 50 yards; to one wharf on Cooper river, 30 to 40 yards; to Lamprier's point, 30 to 40 yards; any vessel that can cross the bars, can lay at anchor at those distances from the shore, in 4½ to 5 and 7.

Question 15. General health and quality of the soil?

Answer. There are only three months considered sickly, in this State —August, September, and October. Soil, in some places, mud and sand. High land, generally sandy.

Question 16. Wharfing to the channel?

Answer. Palmetto logs resist worms, and are in general use in building wharves, and may be had in abundance. Stone may be had from the North, to fill up, or build and shingle. Ballast from merchant ships for the like purpose.

Question 17. Whether the worm is destructive in the harbor?

Answer. The worms cut from April to November, and a new bottom has been destroyed by them in six weeks, so as to require new plank.

Question 18. Price of provisions of every kind?

Answer. The price of provisions vary, according to seasons, and a variety of occurrences, and to fix a stationary rate is not practicable, in any city of the United States.

Question 19. The facilities of obtaining timber?

Answer. The facility of obtaining pine timber, cypress, and white-oak, is easy; it is cut on Edisto river, and rafted to the city: live-oak is cut on the islands, and upon the main land, and is sent to the city in small vessels constructed for the purpose.

Question 20. Number of mechanics to be obtained, and laborers; also, the daily wages of each?

Answer. There are shipwrights, white and colored, 120; black and whitesmiths 130; gunsmiths 15; block and pumpmakers 25; boatbuilders 16; shipjoiners 10; brassfounders and coppersmiths 10; sailmakers 32; riggers 20; painters 60; coopers 60; turners 16; tinworkers and plumbers 20; millwrights 16; wheelwrights 34; cabinetmakers 60; coachmakers 40; housecarpenters 200; tanners 40; bakers 60; butchers 100; sawmills, impelled by water and steam, 8; iron-foundries 2; ropewalks 2; shipchandlers 6. There are, also, a number of other tradesmen, whose occupation is essential in the community. The wages of white workmen is $2 per day; black or colored $1; and colored laborers can he hired at ten or twelve per month. The general average of wages is $1 12½ cents per day, and is cheaper than in Boston.

JNO. ROBERTSON.

Charleston, May 18, 1825.

No. 3.

CHARLESTON, *August* 5, 1825.

DEAR SIR: The polite acceptance of the offer made you to contribute our personal services and information in aid of the important investigation you are commissioned to make touching the expediency of establishing a national navy yard at Charleston, with the specified points of inquiry subsequently received, were early submitted to the consideration of the committee. A desire to impart full and minute information, the difficuty of procuring a simultaneous action on subjects eliciting the opinions of several, and your indulgence limiting the suspension of this reply to our own convenience, we respectfully offer as apologies for the time permitted to elapse since your communication was received.

To the several inquiries whether there are good positions in this harbor? their proximity to a depth of water equal to that on the bar?

the facility of obtaining fresh water? and the general health of such positions? the committee have instructed me to make the subjoined replication.

There are several, well adapted to the uses of the Government. The best in some respects, are already occupied for commercial uses, and can now be procured only at a cost which it is probable would constitute a serious objection. Those which remain may be procured and improved for a trifling amount, and do unquestionably offer some advantages of which the first are not susceptible.

On the Cooper river, and within the corporate limits of Charleston, is a lot, the property of the heirs of the late Henry Laurens; very capacious and contiguous to springs of fresh water. The health of this spot may be estimated by the health of the city; it consists of shoal and high marsh lands, occasionally covered by the tides. The depth of water 20 to 25 feet, where the improvements will be made, leaving an extensive dock in the rear. The distance from the high land to the channel is 1,100 feet.

The next, a lot of land above Gadsden's wharf, for a description admits of reference to the first; possesses the same advantages and disadvantages; is without the corporate limits of the city, and is supposed to be generally healthy, even to foreigners,

At the eastern extremity of the Charleston line another has been noticed, but its inaccessible location renders it ineligible, though presenting the advantages of health and good water.

The ship-yard on Town creek, occupied by the late Paul Pritchard, and by him selected for building the frigate John Adams, is three miles from the city. The high land is contiguous to the channel, and affords an adequate depth of water. This situation is sickly in the fall of the year; and good fresh water can be procured only by cisterns, or transportation in tanks.

Hobcaw, the property of William Pritchard, is a bluff on the eastern side of Cooper river, 2½ miles from the city, at the base of which is an adequate depth of water for any naval purposes. The health of this position is equivocal; it is the received opinion that fall fevers occur sometimes here. Fresh water is abundant, and very good. There are one or more positions contiguous to this spot, and very highly esteemed by practical men for their adaptation to the uses contemplated. Prince's point, and a piece of land, the property of W. Smith, jr., may merit your inspection.

Shute's Folly, the island of marsh land, opposite the city, on which Castle Pinckney is located, affords two or more admirable positions; a light cost, in a national view, would render this the very best site for such an establishment. The health of this place has often been tested, and may, with no impropriety, be compared with Sullivan's island. Its insular situation will advance and facilitate the establishment and maintenance of subordination and discipline; while it places without the reach of depredation the materials and stores requisite for naval uses. Fresh water may be obtained in tanks, or received into cisterns. The channel on both sides of the island affords an adequate depth of water for any vessel that can pass the bar.

These are all the positions on the Cooper river, and one of its con-

fluent streams, that the committee think would answer. Your attention will now be directed to the Ashley. The first, on Mr. Duncan's mill establishment, is on the edge of the river; at his wharf a depth of 18 feet water will be found, and any required depth by a small projection of the work towards the channel. A good road has been made to cross the marsh 700 or 800 feet in length to this point: it would be requisite to augment the space now occupied as a lumber-yard, by filling above the high tides the contiguous marsh lands. Fresh water must be procured for this position through the intervention of tanks or cisterns. This situation is considered healthy. In ascending the river a few hundred yards, another situation is offered, holding a high place in public estimation: Mr. Martin Strobel's steam-mill lots, and the lots of Messrs. Hurtz, Brisbane, and Hadeston, to the west. An extensive shoal of 7 or 800 feet is here interposed between the high land and the channel of the river. This situation is healthy, affords good fresh water, is covered from equinoctial gales, and the very best for obtaining the requisite supplies of materials, fuel, &c. The two latter places are within the corporate limits of the city.

From this position to or near the Grove, the residence of the late William Lowndes, a margin of marsh land of 1,500 to 2,000 feet skirts the river; at the Grove the river again washes the high land, affording a site easily improved, yielding a supply of good water, but not so accessible as either of those first mentioned, and supposed to be sickly in the fall of the year.

These are all the positions near or within the city which the committee think adapted to the contemplated work. It is apprehended that objections may arise to the extent of shoal and marsh land, which must be necessarily embraced in the completion of a navy yard. Such objections will disappear when the original cost, the facility of improvement, and the great advantages they offer, are considered. The lands thus circumstanced are usually procured at a small cost, and the materials for filling and raising them, cheap and abundant.

Individual enterprise, even under prospects of equivocal benefit, evinces the correctness of this opinion, nor are the advantages they present to be disregarded. It is indispensable to every such establishment in this climate, to have the command of a commensurate dock for depositing and preserving the timber and other materials required for the building and repair of vessels. In such they are kept without injury from the worm for many years, and obtain a durability proportioned to their continuance in the salt water; the saline particles percolating and displacing the natural moisture or sap. The expediency and propriety of such an appendage cannot be too earnestly urged.

Experience favors the general impression that the worm is not so destructive in this harbor as in lower latitudes. Small vessels, navigating the rivers and creeks near Charleston, require to be careened two or three times in the year; but, as they are protected only by the pitch, and perpetually exposed to have it removed by the shell-banks and shoals, on which they frequently lie at low water, this extraordinary case will not surprise. The materials for building and repairs are perfectly protected by the docks, previously the subject of remark; vessels of war on a Southern station are usually shielded by copper.

The material uniformly employed in constructing the wharves of Charleston, is the cabbage or palmetto tree. The strength and durability of this wood, when skilfully united, and its capacity to resist the worm, considered, places it high in estimation. In the employment of this, but a small sum is requisite for the completion of an extensive work. Pine wood, mud, sand, and stones, furnish the filling, and are abundantly supplied.

There would be no difficulty in procuring an adequate supply of provisions for vessels of war. The quantity would keep pace with the emergency, and increase as rapidly as the public wants should indicate. During the last war, when our Northern supplies were intercepted, an abundance of wholesome flour, and of cattle and hogs, were furnished to the troops, on various Southern stations, from this place. Independently of the resources of this State, Tennessee, Kentucky, North Carolina, and Georgia, would contribute, on any new emergency, to answer every possible demand. These States were resorted to, when our usual resources had failed, but the facility, in a time of peace, of procuring provisions from the Northern States, would remove every doubt of a deficiency.

Thus far we have replied, specifically, to the interrogatories you were pleased to make to the committee; and, under the general privilege of furnishing any other information, we take the liberty to subjoin the following remarks:

The bar has been, and is still, regarded a potent obstacle to the establishment of extensive naval operations at this place. We are fully aware of the reasoning on this subject, and the minute practical information you have procured by a laborious investigation. It is a matter, however, so vitally important to the prosperity of Charleston, that we would lean confidently on your indulgent attention for the suggestions here offered. Mr. Michael Dulany, a man of respectability and great experience in his pursuit as a pilot, declares, with confidence, that a vessel of war drawing eighteen feet water, and a merchant ship of seventeen feet, can cross the bar: the superior sailing of the former rendering it more safe than for the latter. Within the knowledge of the committee, two merchant ships did go out a few days since, one of them drawing sixteen and a half feet, and the other seventeen feet, on an ordinary tide. There is, however, not one of higher authority than your own to attest these facts. If, however, a conclusion hostile to our desires results from the impression that the depth of water is insufficient, and the bar dangerous, we do conceive that the removal of the impediment is not only within the power but the province of the National Government. In seeking the remedy, it is expedient to recur to the originating cause of the defect. One of the early acts of the corporate authorities of Charleston was to fix the rates of pilotage. By these, vessels drawing twenty-one feet are recognised, and could not have obtained a place there had any obstruction existed to their passing in safety. If, then, (and the fact may be further illustrated by reference to other official documents,) there was twenty-two or twenty-three feet water on the bar, the difference which now appears is calculated to excite alarm, and interest all those whose duty it may be to trace the cause, and arrest an evil which threatens to annihilate the commerce of Charleston. This cause,

the committee think, will be found in the receding points of Sullivan's and James's islands. It is the opinion of several old and observing gentlemen that, at the period when General Moultrie so gallantly defended the palmetto fort, the proximate points of those islands were from six to seven hundred yards nearer than at present. As this outlet widens, the bar necessarily becomes shallower.

By the dispersion of the confluent streams of Ashley and Cooper rivers over this augmented space, the currents lose their effective and direct action, are divided, and minor channels are formed, and the deeper gradually closed.

Should the Government carry into effect a favorite and long contemplated measure of defence, that of constructing a permanent fort at the eastern extremity of the shoal or bank leading from the present site of Fort Johnson to Sullivan's island, and uniting it to James's island by a sea-wall, and protecting Fort Moultrie by a similar wall, projected from the west end of Sullivan's island, in process of time the bar would afford a greater depth of water, the city obtain the defence it has long required, and the port of Charleston, in its increasing commerce, and the advantages it would present to the naval service, amply refund the sums thus applied. It is confidently believed by the committee that General Bernard recommended this position as the best in the harbor for a fort. It will not certainly be regarded immaterial to the General Government to have a secure and always accessible point of rendezvous between the Capes of the Chesapeake and the Floridas. During a period of war it is indispensable. There is certainly not one on this great extent of coast more convenient or improvable at a less cost.

The number of mechanics at Charleston vary from 12 to 1,500; of these 120 are ship-carpenters, particularly devoted to that branch of business. This number may be augumented in a short time to answer every possible call. Our young men have hitherto been prevented from engaging in a pursuit unhappily rendered unproductive, and in which there rarely occurs an opportunity for the display of skill or exercise of talents.

Since the adoption of the constitution, and consequent surrender of the imposts to the General Government by this State, this branch has declined; for, with the exception of a vessel of war contributed by this State, or, perhaps a few gun-boats and revenue-cutters, ordered by the General Government, and some slight repairs to vessels on Southern stations, the patronage of the General Government has been withheld. It will not then be looked for that we should at once compete with the Northern cities, into which the national favors have flowed with a perpetual and exhilarating stream, eliciting, improving, and rewarding exertion.

Amongst the mechanics of Charleston are many ship-joiners and blacksmiths, emulous to vindicate their just claims to merit, and a portion of the public favor. Our bakers are confessedly equal to any in the Union for their promptitude in executing orders, and the excellence and durability of their bread. If to these we add the low rates at which ordinary laborers may be employed, it will not surprise when we assert that a vessel of war can be built and fitted for sea, under all the disadvantages we labor, for as little money as in any other city in the Union.

The number of seamen, it is reasonable to infer, will have a just ratio

to the commerce of a seaport, but we indulge the opinion that it will rather exceed than fall short of that proportion at Charleston. From Cape Henry to the mouths of the Mississippi, an extensive coast is presented, on many parts of which are the allurements to water excursions, which primarily promotes that knowledge and those dispositions which constitute the sailor.

From such, in time of emergency, (and the case has already occurred,) influenced by patriotism or interest, a considerable number have embarked, and with adequate skill to be highly useful either as mariners or seamen; to such there is no point of rendezvous superior on this extent of coast to Charleston.

Our marine hospital has acquired a reputation which places it deservedly high in that class of public institutions. For, notwithstanding an insufficient allotment of funds under the acts of Congress relating to this subject, the City Council of Charleston, influenced by a commendable regard to this valuable class of citizens, have exhibited the means of securing to them the best attendance and medical skill of which such an establishment was susceptible. It is now so well organized and conducted that, for the number of patients, as many pass from it cured or relieved as from any other perhaps in the world, while a complaint is rarely or never heard.

We are sensible, sir, of the trespass committed on your time and attention, but the deep importance of the subject, and the great interest we represent, will, it is hoped, furnish satisfactory apology.

With the highest respect and regard, your obedient servant,

THOS. BENNETT,

Chairman of the Committee of Citizens interested in the establishment of a navy yard at Charleston.

P. S. I have been directed to add that vessels can now, with the aid of steamboats, cross the bar, without regard to the direction of the wind, during the day; and, with the aid of another light, could pass at night with equal safety and facility.

Capt. LAWRENCE KEARNEY.

No. 4.

Letter from Jos. Johnson and John Stoney, in relation to the port of Charleston affording suitable sites for a navy yard.

CHARLESTON, *January* 3, 1825.

DEAR SIR: You have paid us the compliment to ask information respecting the sites for a navy yard, in the vicinity of Charleston. We cheerfully afford such as we possess, but can only suggest some of the relative advantages and disadvantages of each. Your better judgment must decide.

We suppose it an object of some importance that such an establishment should be as near to the city as would be consistent with health, for the convenience of portage and transportation, and for mutual support, in case of invasion.

The first that we propose, is that well known as Strobel's steam saw-mill, and the land running from it westwardly, to the channel of Ashley river. This is the situation resorted to for safety, by vessels, during our severe N. E. and S. E. gales. It is safe from both town and country fever, if the workmen will confine themselves to that neighborhood, during its prevalence; and affords, we believe, a sufficiency of good drinking water. It is the most convenient that can be chosen, for procuring all necessary supplies of yellow pine, timber, and plank, and for preserving these and other timber and spars. It is feared that the wharf required to reach a sufficient depth of water for large vessels would be expensive, both in its construction and repairs. It is said that although there is an extensive flat on this shore, the channel makes a bend near this particular situation. On this point you must examine for yourself, or obtain correct information from Mr. Beach.

At the northeastern extremity of the lines, in Hampstead, about one and a half miles from the city, is a high and healthy situation, with a good landing, and excellent water. This has been recommended, provided the adjoining marsh land be purchased to the channel of Town creek. Here it would be necessary to build a short wharf, and connect it with the high land by a causeway and bridge; the distance about one-fourth of a mile. The depth of water would be abundant, and the whole establishment sheltered.

Castle Pinckney, and the island on which it stands, is likewise recommended for our purpose. Its insular situation, proximity to the city, protection from the castle, facility of transportation by water, fine depth of water, and probable health of the residents, go far to recommend it. On the other hand, the marsh is all very low, and overflowed by every spring tide; the southeastern portion, in particular, is exposed to gales. No fresh drinking water is to be had, except from rain collected in cisterns. The northern extremity is a shell-bank, with a fine landing, on which a stone or other wharf, and permanent buildings, may be easily erected at a very moderate expense. Vessels, even of the largest size, would be pretty secure from gales, either lashed to this wharf, or at anchor near it. The distance from the castle to this extremity is three-fourths of a mile.

The old ship-yard, where the John Adams was built, has some advantages, but is supposed to be too distant for convenience of transportation, and, by some, is believed to be exposed to country fever.

The situations at Hobcaw have the same advantages and disadvantages as the preceding, the latter in a greater degree; and some danger may be apprehended from an enemy in time of war.

The anchorage, every where, is very good, and the annoyance from worms, although common in the summer months, not worse than in other Southern ports.

We are, very respectfully,
Your very humble servants,
JOS. JOHNSON,
JOHN STONEY.

No. 4.

Letter from Charles P. Mey, offering his wharf as a suitable place for a navy yard.

CHARLESTON, *August* 11, 1825.

DEAR SIR: By your desire, I address you these few lines at your departure for the North, to give you the dimensions and other particulars of the wharf property which will be disposed of to the United States, if wanted; a part of which was formerly occupied in this place by the Navy Department as a navy yard.

Both wharves have complete stores on them of brick and tiled roofs. Of the south wharf, formerly where the navy yard was kept, you have herewith a plan, according to which, the dimensions are thus:

The wharf, 282 feet long, from Concord street east, to the channel of Cooper river; it may be carried out further, if required. The front of the same is 87 feet; width of wharf, 43 feet; dock on south side, 30 feet; and on north, 14 or 15 feet; length of the docks, about 220 feet. To the west of Concord street (50 feet wide) there is a lot with two large brick stores; the lot measures 87 feet by about 80 feet. For this said property, as was mentioned on a former occasion to Captain Sinclair, thirty thousand dollars will be taken.

Adjoining the said property to the north, is my father's wharf and stores, of the following dimensions (description:)

Front, about 112 feet, and extends from the east of Concord street, (as the other wharf) to the channel of Cooper river, within about 20 feet as far as the other, say the south wharf; width of the wharf, 46 feet. On the south side is a dock of 35 feet wide, and on the north, 32 feet.

To the west of Concord street (as the other property) there are three brick stores, on a lot of about the same dimensions as the other, and on the wharf there are, besides, two wooden stores, tiled roofs.

Between the two wharves there is a street, as you see marked in the plan, (Pinckney street,) 33 feet wide, which adds to the dock room. From the said plan, you have the appearance of both properties. For the latter, my father will be willing to take thirty-five thousand dollars.

I have given you all the information I can; you know its situation, as to the good order in which the premises are, as well as the security and safety thereof, and other particulars. Meanwhile excuse my haste.

I am, very respectfully,

CHARLES P. MEY.

TO CAPTAIN KEARNEY.

P. S. I have to beg you will inform me, should there be any disposition on the part of the United States to purchase.

I will be ready to furnish any further information respecting the said property, if required, or whenever addressed on the subject.

No. 4.

Letter from James Marsh, offering his wharf as a suitable site for a navy yard.

CHARLESTON, *August* 12, 1825.

SIR: I am not positive in my recollection whether, in the letter addressed to you by the standing committee, respecting the local sites and situations in the harbor of Charleston most suitable for a naval establishment or ship-yard, the sites of Lamprier's point, or Marsh's ship-yard, at what was formerly Gadsden's wharf, were mentioned as suitable situations. If they were not mentioned in that letter of general information, I beg leave to draw those two last situations to your recollection. Lamprier's or Prince's point, I know you have particularly examined, and is on the opposite side of the town.

My ship-yard, at the wharf, (formerly Gadsden's,) is situated in the upper part of the city of Charleston, and is an old-established and firm place, the situation perfectly healthy, handy to the saw-mills. The lumber, plank, &c. are all brought from the mills by carts, and dropped at the yard gate, handy to the city for any and every use that may be required.

There are four fathoms water at the head of the wharf, and at the sides. I heave out and repair ships. There is a good building-yard and launching slip, which I have used for a ship-yard these last eighteen years, and have built a great many vessels in that time.

There is a new dwelling-house on the premises, with double piazzas on the front, (which is to the south,) and the two ends, built on a stone foundation, and of the best materials, with cellar, kitchen underneath, and store-rooms, pantries, and dressing-rooms, counting-house room, and all the necessary requisites, all which are finished in the best manner. It is suitable for the residence of a private family, or persons attending the ship-yard. It is of very little use for me to describe the place to you, as you have a knowledge of it already. But should my ship-yard be deemed by Government a proper and suitable situation for a naval ship-yard for Charleston, and as it can be occupied and made use of immediately, without any expense to Government, I would be disposed to sell it for the use of the Government, (when I would not do it to an individual.) My price for the whole premises, including the house and wharf, work-shops and work-shed, would be twenty-five thousand dollars, which is considered a very reasonable price for that property.

N. B. I omitted to mention there is a very fine brick cistern on the premises, containing 35 to 40 hogsheads of rain-water for the use of the house and ship-yard. From the upper piazza is a fine view for an observatory, commanding a view of the whole harbor and sea-vessels running down to the bar or passing our harbor.

I wish you to lay this letter, with your other information, before the honorable Secretary of the Navy, or other department of Government, that you may be connected with in your official and private capacity.

I am, sir, with much respect,

Your humble servant,

JAMES MARSH.

LAWRENCE KEARNEY, Esq.

No. 5.

Report of Doctor George Logan in relation to the health of the several positions in the harbor of Charleston, proposed as suitable for a navy yard.

CHARLESTON, S. C., *April* 27, 1825.

SIR: The subject of the healthiness of the several places near this city which have been examined and pronounced suitable sites for a navy yard, has received all that attention which its interest and importance requires. In compliance with your desire, I submit an opinion, the result of my diligent inquiries.

1st. LAMPRIER'S POINT, (Prince's Ferry place.) This is distant about three miles N. E. from Charleston, on a bluff, commanding the entrance of Wando river. Many circumstances concur to render this an eligible situation, but although generally healthy, the inhabitants are not exempt from occasional attacks of ague and fever, especially those who are much exposed after a wet summer. The drinking-water is excellent.

2d. SHUTE'S FOLLY, the mud island on which Castle Pinckney has been built, distant about one mile east from Charleston.

This is not liable to the foregoing objection, there being here no noxious or miasmatic exhalations, or other causes of endemical fevers. It is, however, much exposed to the violence of storms and inroads of the sea, and produces no wholesome water, either for drinking or culinary purposes.

3d. STROBEL'S MILL-SEAT, Cumming's point. This place is perfectly healthy at all seasons, the drinking water excellent, and the distance from the immediate vicinity has been known to be exempt from yellow fever when that disease prevails in Charleston.

4th. THE LATE NAVY YARD, formerly Captain Cochran's farm, distance about four miles from Charleston. The drinking-water is good, but the situation is liable to the same objections noticed in our view of Lamprier's point.

5th. THE ENTRANCE OF TOWN CREEK, Hampstead. This, in point of salubrity, equals Strobel's mill-seat; the drinking-water is good.

6th. MARSH ISLAND, woodlands. This is liable to some of the inconveniences mentioned in our description of Shute's Folly; the situation is healthy.

I am, sir, yours, respectfully,

GEORGE LOGAN,
Naval Hospital Surgeon.

LAWRENCE KEARNEY,
Master Commandant, U. S. Navy.

F.

WASHINGTON, *January* 16, 1826.

SIR: I take the liberty of sending you some papers containing additional information on the subject of the expediency of establishing a navy

yard at Charleston, S. C., of which you may make any use you think proper.

I am, sir, very respectfully,
Your obedient servant,
ROBERT Y. HAYNE.

The Hon. SECRETARY OF THE NAVY.

No. 1.

ANSWERS OF JOHN STROHECKER.

The bar at Charleston.

First question. I answer, from the information of the oldest sea captains and pilots of this port, that the largest ships trading to Charleston draw from sixteen to seventeen feet of water; that they go out with safety and easily; that Charleston is a port of as easy and safe access as any port in the United States, and more so than many. From Cape Roman to Martin's Industry, there is a gradual unvaried slope in approaching the bar.

Second question. From information of pilots and the oldest sea captains of the port, it appears that the John Adams, built and equipped here, drawing seventeen feet eleven inches water, was piloted out, and in perfect safety; that the American ships of war Hornet, Wasp, (a sloop of war commanded by captain Jones,) Enterprise, and many others, during and since the late war, have visited Charleston, and never experienced any delay in going out or in; that the Indian, Driver, Zebra, Cherub, and other British sloops of war, with many heavy British brigs of war, have visited Charleston, and never met with delay at the bar, or in being furnished with supplies. The Margaret and Hindostan, ships built in Charleston, drawing seventeen feet water, traded always to this port; that, during the late winter, the British ships John and Mary, and Royalist, drawing seventeen feet six inches, were loaded with rice and mahogany in this port.

I beg leave here to state that, in my opinion, the bar of Charleston can be deepened at a small expense, and without risk, and that it ought to be done by the United States, in connexion with their fortifications about to be erected in this port. If necessary, I will give my idea how it can be effected.

The situation of Charleston as to supplies.

Third question. Charleston is situated in a country abounding in grain and cattle, and supplied in those articles by the States of North Carolina, Kentucky, Tennessee, Alabama, and Georgia, especially by their cattle, hogs, sheep, flour, &c. which come to it for sale—flour often selling as cheap, and always nearly so, as in the Northern ports, and whose market affords, *every day throughout the year*, vegetables of the best kind, with beef, pork, veal, mutton, venison, fish, and poultry, as cheap, generally, as in the Northern cities; in proof of which I refer to the public institu-

tions being now supplied with beef, veal, pork, and mutton, at four and three-quarter cents per pound. As for water, there is a spring near the city, accessible at all times to boats and water craft, sufficient to supply any navy, and keeps well at sea. I, therefore, say a city so situated can afford supplies for any fleet, and that Charleston certainly affords more facilities, better and cheaper supplies to vessels of war, than any port between the Capes of Virginia and Florida.

I would refer to the statements of Captain Pratt and others, now in my posseasion.*

Health of Charleston.

Fourth question. Vessels coming into Charleston during the summer season free from epidemic, will, with little or ordinary care of keeping the seamen from dissipated habits, a precaution necessary in every port, and not more so in Charleston than in any other in the United States, enjoy as good health as in any city of the Union. On the score of health there can be no substantial objection. Our winters are healthier than any Northern city; and in seasons when no yellow fever occurs, no city on earth enjoys more health. The yellow fever prevailed in 1807; from this to 1817, the city was free from it; in 1819 it appeared, and in 1824. It is probable that in process of time its occurrence will be rare, from the vigilance of the police and the improvement of the city. New York and Philadelphia have the epidemic yellow fever almost, if not as frequently, as what we have; and what is worse, in these cities, it affects all the inhabitants indiscriminately; whereas, here it is partial, and confined to strangers. (See Doctor Simons's and others' statements.)

5th question. During the season when the yellow fever prevails, Hailestur's Green, Mazyckborough, and Canonsborough, are all free from its ravages; in the summer of 1824, upwards of fifty persons, all strangers to our climate, were employed in repairing steamboats, at the west end of Beaufair street, near Mr. Strobel's steam-mill, not one of whom took the fever. A German vessel with her crew, during 1824, lay in Cooper river, opposite the city; not one of her crew was taken sick. Numberless instances might be cited. It will therefore appear that ordinary care on board of the vessels in the harbor, and if the navy yard or depot was established on Ashley river, near Beaufair street, the men would be in no danger from the yellow fever. The crews of our vessels of war stationed here during the last war, were as healthy as in any port in the Union. (See Doctor Simons's and others' statements.)

Advantages of Charleston as a naval depot.

6th question. Charleston is better situated than any port between the Capes of Virginia and Florida; and all nautical men agree that it is preferable in every point of view to Key West, for a rendezvous for the squadron appointed to suppress piracy in the West Indies. Captains Pratt, Butler, Fuller, Alexander, and others, men who have, for years, traded to the West Indies, are unanimous on this subject.

* It is my opinion that the States of North Carolina, Kentucky, Tennessee, Alabama, and Georgia, are greatly interested in the establishment of a navy yard at Charleston, for much of their produce is brought to the Charleston markets for sale—especially their hogs, cattle, sheep, flour, bacon, &c.

7*th question.* The facilities of Charleston for a navy yard are not surpassed by any port in the Union; and in some respects superior to many. Timber of all kinds for ship-building is to be had in abundance in the neighborhood of the city, such as live oak, red cedar, pine, all of the best quality. Mechanics may at all times be had, and a competition among them will take place. I beg leave to refer to an annexed statement of the number and price of labor. Cordage and canvass can be procured at the prices stated in the estimate of a sloop of war, at which prices the ship-chandlers offered to furnish them, and one of them offered to engage to furnish sufficient for 10 sloops of war during the course of a year. Vessels are daily rigged, and from the information of captains and merchants, nearly as cheap, and in some instances cheaper. Hemp, the growth of this State, was formerly exported, and by experiment proved to be stronger than the imported.

Vessels repaired at Charleston.

8*th question.* Vessels of war, American and foreign, have been repaired in Charleston, and with satisfaction to captains and agents; several ship-carpenters have examined the estimate of a sloop of war built at Charlestown, Massachusetts, and do say a similar one can be built here for the same or rather less sum. There are several ship-carpenters of considerable capital, and for workmanship excelled by none—witness several vessels built here during the last war. They are willing to contract to build such a vessel, but as all vessels of the United States navy are now built by the day's work, (as found by experience to be the best mode,) several of them are willing to act as foremen, and hire their workmen to the United States at reasonable wages.

Sites for a navy yard.

9*th question.* There are several situations suitable for a navy yard, and afford all the facilities, in the opinion of sea captains and others, requisite for it; especially one at the west end of Beaufair street, on Ashley river, near Martin Strobel's steam-mill. The situation is healthy in the sickliest season—see answer to 5th question—and I have remarked that, for 28 years past, strangers who resided in that part of the city escaped the yellow fever. I might cite numerous instances of mechanics and others. This situation is likewise protected from our autumnal and easterly gales; for, should the United States establish a navy yard and place it on Cooper river, it would be liable to be destroyed by a gale such as 1804. If this should occur, it is natural to conclude the United States would withdraw it, and, perhaps, never order another to be erected. I am supported in the above opinion, by every seafaring man whose opinion was requested. Portage to it is cheap and easy. The timber market is on the spot, and the saw-mills in the neighborhood; some improvements of brick are likewise on the spot.

Advantages of Charleston.

10*th question.* The advantages of a navy yard at Charleston, S. C., to the United States, would be a more efficient aid to a speedy suppression

of piracy in the West Indies, as vessels of war would be sooner on most of the cruising grounds. Vessels generally reach the Havana in 80 or 90 hours from Charleston, with efficient crews, and, on their return, would be with expedition refitted for another cruise, with a crew refreshed and recruited, and in good spirits; whilst, from Key West, or any of the half-dry spots in the neighborhood, if there refitted, the crews are emaciated and dispirited by disease, and wants which are not to be had. I refer to seamen who know what difficulties occur with a dispirited crew—and here I beg leave to remark that, on all those islands, no good water can be procured, nor ever will. The case is this: after digging a well, if I may call scraping away a few feet of sand, you may get the first hogshead to appearance good, but the next is worse, and so on, until it becomes at last brackish, and of no use for shipping; besides it will not keep at sea. A volume might be filled with inconveniences and loss incurred by retaining the rendezvous at one of those islands.

There is another and very important reason in favor of Charleston, over every Southern city, which is the strength of its population, in being always able to protect a naval station in peace or war; whilst, in every other Southern port, it would be necessary to have a regular force to protect it; and if, in time of war, the population of the city is not sufficient to protect it, is there another city in the Southern States so ably supported by a population who can be collected from its own and neighboring upper parts of the State? From which I would deduce this: that it would be wise in Government to attend to the port of Charleston, first by establishing a navy yard here for building sloops of war, and other small vessels, and next, to inquire if the bar can be deepened. If so, that it would be the interest of the United States to establish one for large vessels. Anchorage in and outside of the bar of Charleston is excellent, and not exceeded by any port in the Union. The British sloop of war Driver rode out the gale of 1804, off the bar; and, during the Revolution, a 64-gun ship lay off at anchor for near a twelve-month; and so, during the late war, the enemy lay at anchor off the bar. The good anchorage of the harbor of Charleston is notorious among seamen.

Captain Pratt states he had a ship called the St. Andrew built in Charleston, 320 tons, copper-fastened, was completely fitted out under his own inspection, in 1804, every thing being of the best quality, and all procured at this place, at a time when materials were higher than at present, and the cost did not exceed $22,000. Her cordage was of South Carolina hemp, and proved to be stronger than the imported.

Charleston will, ere long, be supplied with iron of a superior quality from the back part of this State and North Carolina. During the late war, we received much of our bar iron from there, and she supplied Charleston with cannon ball, &c. as cheap as the Northern cities.

A navy yard at Charleston would give the United States command of a number of mechanics accustomed to the climate, and they could, in case of emergency, be employed on the neighboring (islands) in cutting timber for the navy yards at the North.

JOHN STROHECKER.

No. 2.

CHARLESTON, *April* 21, 1824.

SIR: I yesterday received your favor of the 12th, and immediately instituted the inquiry you proposed. It is with pleasure that I communicate the following result:

Price of labor.

White ship carpenters, - - -	per day,	$2 00
Do blacksmiths, - - - - -		1 25
Do block and pump makers, - - -		1 25
Do ship joiners, - - - - -		2 00
Do riggers, - - - - -		1 50
Do painters, - - - - -		1 00
Do turners, - - - - -		1 00
Do coopers, - - - - -		1 00
	8)	11 00
Average, - - - -		1 37½
Negro carpenters, - - - -	per day,	$1 00
Do blacksmiths, - - - - -		75
Do blockmakers, - - - - -		87½
Do joiners, - - - - -		75
Do riggers, - - - - -		1 00
Do painters, - - - - -		75
Do turners, - - - - -		75
Do coopers, - - - - -		75
	8)	6 62½
Average, - - - -		82¾

RECAPITULATION.

Average price of white laborers, - - -		$1 37½
Do black do. - - -		82¾
	2)	2 20¼
Average hire of white and black mechanics, -	per day,	$1 10

REMARKS.

1st. Many of the ship carpenters have worked, and some of the whites have acted as foremen in navy (yards) at the north, where ships of war were built, and assisted in building them.

2d. Most of the mechanics, if hired by the month, may be had cheaper, especially black mechanics. I know that black shipcarpenters can be hired by the month at $20; blacksmiths, $15 to $20 per month; paint-

ers and others, cheaper; porters and others not mechanics, $10 to $12 per month.

3d. A very large proportion of the work about a vessel of war may be done by the blacks, and the average thereby probably reduced to $1 per day.

4th. The above information was obtained without exposing the average price of labor in other places.

In addition to the above, it may be worthy of remark, that a commissioner was nominated by our Legislature, in their last session, to inquire and report if any, and what improvements may be made in our harbor, with the view of a naval depot being established here. This suggestion originated with Mr. Mills, but has been materially altered, in consequence of a recent survey. At low water, we found 14 feet of water in the middle channel, or swash, which would give 20 feet at ordinary tides, and probably 22 feet at spring tides. This channel is fully half a mile wide, diminishing of course in depth on both sides. It is now better, and much more direct and easy of entrance than the ship channel ever was, and this change has taken place within a few years, occasioned by an accidental circumstance. A large ship, an East Indiaman, a prize, was chased in during the late war, and lost in the old north channel; her hulk obstructed the current, and now a pilot boat can scarcely pass through it. In consequence, as we believe, of this, the middle channel has improved, and Sullivan's island has washed away very much. The island channel is still very inconsiderable, may be easily obstructed by a hulk, and by which the valuable public and private property there may be preserved from the encroachments of the sea, Fort Moultrie preserved, and the harbor rendered capable of receiving large ships of war. The coast from Cape Roman to Martin's Industry, off Port Royal harbor, is uncommonly fine, being a gradual slope of one fathom to a ——, until they reach four fathoms, beyond which none should approach without a pilot. I enclose a rough sketch, that I may be the better understood.

Yours, with much esteem and respect,

JOS. JOHNSON.

Hon. ROBERT Y. HAYNE.

No. 3.

CHARLESTON, *September* 20, 1825.

SIR: Your interrogatory, respecting the naval facilities of Charleston, has been submitted to me to answer, viz: *Q.* "Have you not seen and examined a statement of the cost of materials and building of a sloop of war at the navy yard at Charlestown, Massachusetts; and could not a similar vessel be built in Charleston, South Carolina, for the same or a less sum?"

A. I answer, that I have formerly seen such an estimate, amounting to $46,516 25, for the hull, spars, and boats, of a sloop of war, to rate 18 and mount 22 guns. Since which, I have seen the same amount confirmed, in a communication from the Committee on Naval Affairs to the honorable the Secretary of the Navy, under date of January 7, 1823, (and

entitled No. 3, estimate of the cost of building a sloop of war of the first class;) and I candidly think that similar vessels can be built in Charleston, South Carolina, on equal good terms.

To the second part of the interrogatory—"Are there no ship carpenters in Charleston with considerable capital, and excellent workmen, who are willing to contract to build such vessels, on these terms?"—I answer, that I am a ship carpenter, and sufficient master of my business to build a sloop of war and spar her, and that I have it in my power to give any instructions and directions that might be wanted, either to the block-maker, sail-maker, or rigger, as to size and quantity of any article in their departments. As to my capital, I will only say, my taxes amount to between two and three hundred dollars yearly. As to my character, I leave that for others to estimate; but I may speak of the characters of others of my profession: there are others and worthy ship-carpenters in Charleston, competent to build a sloop of war. As to myself and son, we should be much pleased and highly gratified to be encouraged by Government, and permitted to build a sloop of war for them, on the same terms and price as that mentioned by the Massachusetts estimate; and if we should not make any thing by it, yet it would be the means of renewing our spirits and giving encouragement to our mechanics.

As relates to the site for a navy yard, I would offer my own, situated on what was formerly Gadsden's wharf, as one of the most firm and eligible spots in Charleston for that purpose, having been for nineteen years used as a ship-yard, and where I have built many vessels. At the head of the wharf there are four fathoms of water, and at the sides I heave out and repair vessels. The wharf is in good order; there is an elegant dwelling-house on it, with double piazzas, (a fine view of the harbor and the bar, and a very considerable horizon of the sea in sight,) suitable for any officer who might be appointed to the station, and all finished in the best manner, with a brick cistern containing from 30 to 40 hogsheads rain-water. The yard is *in a situation* to lay down a *sloop of war without any expense whatever;* with launching-slip, worksheds, &c., and with the additional advantage of *two saw-mills*, one on each side, to the north and south, and within less than a quarter of a mile of the yard; and with good springs and pumps of *fresh water in the vicinity*, where the shipping that came to Charleston formerly used to water. I would dispose of the whole to the Government on reasonable terms, to be occupied as a public establishment for naval purposes; but will not sell it to an individual.

I am, with much respect,
Your obedient servant,
JAMES MARSH.

The Hon. R. Y. Hayne.

No. 4.

November 12, 1825.

DEAR SIR: I regret that it was not in my power to comply with your request until this moment. Upon looking over the books of the Medical Society I find the accounts as follows:

In 1808, no case of yellow fever,
1809, a few cases do.
1810, one case do.
1811, no case do.
1812, do do.
1813, do do.
1814, do do.

Other years returned by the Board of Health.

I am, very respectfully,
Your obedient servant,
THOMAS G. PRIOSLEAU,
President Medical Society.

JOSEPH JOHNSON, M. D.

No. 4.

BOARD OF HEALTH,
Charleston, November 5, 1825.

The following number of deaths in each year is correct, taken from the books of record, kept by me, and now in the possession of this Board.
JAMES A. MILLER, *Clerk.*

Year.	*Total No. of deaths.*	*Yellow fever.*
1815,	863	None
1816,	867	None
1817,	1,249	270
1818,	995	None
1819,	1,092	176
1820,	827	11 Imported cases.
1821,	921	None
1822,	925	None
1823,	814	None
1824,	1,059	236
1825, to 1st November,	697	3 From the West Indies.

No. 5.

COUNCIL CHAMBER, *October* 25, 1825.

I do hereby certify that the public institutions of this city have been supplied with beef under an annual contract with the City Council, at the prices following, viz:

In 1814,	1815	1816	1817	1818	1819	1820	1821	1822	1823	1824
At $6 50 per cwt.	7 00	8 50	7 00	8 50	8 00	7 00	7 00	6 00	5 25	4 75

WM. ROACH, *Clerk of Council.*

No. 6.

Practical facilities of Charleston for naval purposes.

The situation of this city, deprived, as it has been so long, and continues to be, of the expenditure within itself of any portion of the immense national revenue collected in it and transported elsewhere, has justly excited complaint among our citizens, has wounded the honest pride of our mechanics, and caused among all who study the public good, an anxiety to devise means of redressing the evil. South Carolina bears the same relation to the Union that Ireland does to Great Britain. The Government takes from us all they can get, and do not spend a cent among us. The very solidity of our bank currency is a misfortune. Because we have the honesty to pay our notes in specie, they are caught up with avidity in other States to pay debts to the nation, which returns, like a carrier-hawk, to re-demand the specie; so that the firm basis of our credit is a positive injury to our commercial facilities.

In this state of things, having a right, (for whatever can be proved to be just, becomes thereby invested with right, in a government constituted for the good of the whole,)—having a right, we repeat, to whatever share of public patronage we may fairly deserve, more especially if it be foolishly lavished elsewhere, we shall proceed to explain the really practical benefits to which the port of Charleston may be made subservient for naval purposes, and about which no sensible men will differ.

Charleston is much nearer Porto Rico and to three-fourths of the island of Cuba, (the piratical ground,) than *Key West*, which is at present the rendezvous of the American flotilla.

Key West, or as it is called by the Spaniards, "Cayo Huesso," is about seventy-five miles N. by E. from Havana, and in about latitude 24° 30′ north, longitude 82° west. Its contiguity to the north coast of Cuba has given it some advantages as a rendezvous for our vessels of war in the West Indies, as they can readily fit out an expedition, and arrive at any

point between Cape Antonio and the Matanzas in a very short time after information is given of any acts of piracy being committed along that section of the coast.

But as Key West affords neither good *water* nor refreshments of any kind, and is also unhealthy, it is not necessary, in any way, to our vessels cruising *further to windward;* and to prove the inconvenience of this place as a rendezvous for such as may be required about the island of Porto Rico and the eastern part of Cuba, we will make a comparative statement between the advantages and facilities that station affords, and those afforded to the vessels returning to some port on the Southern coast, where supplies can be obtained at all times sufficient for the description of vessels which can, by their draught of water, enter the harbor.

Vessels of small size are unable to carry provisions and water for a great length of time. The frequent necessity then of re-supplying themselves with these articles, will oblige them to return to Key West often. It is not uncommon for vessels to be four or five weeks in beating to windward from the west end of Cuba to gain the east end, or Cape Maize, as it is called; and it would, therefore, be attended with great inconvenience that, after reaching the weathermost part of their cruising ground, say seven hundred miles from where they set out, they should be under the necessity, for want of provisions, to abandon the advantage gained by so much loss of time and perseverance, and return to *leeward* again for new supplies.

How much better that the vessel should have her time in going down before the wind lengthened, as it would afford her opportunities of visiting every part of the coast or neighboring islands at pleasure.

This may be done by the vessel, instead of commencing her cruise at Key West, *(to leeward of every island in the West Indies,)* commencing it at Charleston, whence she can make either of the windward passages into the West Indies at pleasure, and *in much less time than from Key West*, owing to the relative situation of the two places in point of the winds and currents, which prevail so much in favor of the latter, and which cannot escape the notice of any one who has navigated the two tracks.

It is proper to remark that vessels beating to windward often strain their hulls and rigging very much.

It is also a fact that they have not so good an opportunity of surprising and taking pirates, for they advance so gradually that information of their approach is easily conveyed ahead, either by telegraph or otherwise.

A vessel bound on a cruise off the east end of Cuba, or to Porto Rico, must sail either by way of Cape Antonio, and beat up the south side of Cuba, or through the old Bahama straits, or by the Hole-in-the-Wall, through the Providence channel, or else round the Mattanilla reef, north of the little Bahama bank.

By either of these routes she has to work directly to windward, and although the distance through the Bahama straits seems shortest, yet it is the most dangerous and the most tedious.

The following statement is made from a reference to the chart, which shows the degrees of latitude and longitude which, in the several routes before stated, must be sailed before you can reach the east end of Cuba,

after leaving Key West, and also the degrees after leaving Charleston, to gain one of the windward passages, say Mayaguana :

	Lat.	*Lon.*
From Key West to Cape Maize, by way of Cape Antonio,	4° 16′	13° 50′
From do. by way of the Gulf, round Mattanilla reef, passing north as far as lat. 29° - - -	11° 00′	8° 54′
Old Bahama straits.		
[*Note.*] Frequent calms oblige your anchoring, as well as the danger of running, in dark nights, among the numerous shoals and reefs, - - - -	4° 00′	8° 00′
From Charleston, S. C., to Mayaguana island, one of the passages into the West Indies, which enables you to bring either the west end of St. Domingo, or the east end of Cuba, as you may please, - - -	10° 14′	5° 34′

Thus it appears that a vessel will have to sail but 10° 14′ of latitude, and 5° 34′ of longitude, to place herself in a favorable position to make any point of cruising ground about the eastern part of Cuba.

Vessels returning from their cruise, touching at Havana or Matanzas for convoy, and carrying them through the Gulf past the Bahamas, are again within two days' sail of Charleston, when, if in want of provisions, they can leave the convoy, and put in for it, or stand again to the south-east, for the weather passages, to pursue their duties as before, as they will derive the benefit of the variable winds to enable them to get to the eastward again, after passing the Bahamas.

After a sea voyage men require fresh meats and vegetables, good water, &c., and some relaxation from the toils of the sea. Key West affords none of these.

We hope the above considerations will have their due weight. They have not been submitted without the best reflection and the soundest authority. If they be true, as it is believed, they leave to the Government a very obvious course, which is to substitute Charleston as a naval rendezvous, in the place of Key West.